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Notice of Allowability	Application No.	Applicant(s)	
	10/806,784	HARRIS, DAVID	
	Examiner	Art Unit	
	Michael W. Talbot	3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 29 March 2007.
2. ☒ The allowed claim(s) is/are 1-3 and 5-29.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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MONICA CARTER
 SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 29 March 2007 has been entered.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

Claims 1-3 and 5-29 are allowed.

Claims 1 and 19 are the independent claims.

3. Regarding claim 1, the prior art of record fails to anticipate or make obvious a chuck for use with a manual or a powered driver comprising (1) "wherein displacement of the bearing member results in frictional engagement with an axially extending circumferential lip of the thrust plate", solely or in combination, with a chuck for use with a manual or a powered driver having a central body including a tail section having an axial bore and a nose section having a plurality of passageways defining an axis angled with respect to the axis of rotation of the body, a plurality of jaws slidably housed with the plurality of passageways, a nut mounted on the body and rotatable about the central body having screw threads matching those on the plurality of jaws to cause movement of each jaw for advancement and retraction with the passageways, at least one bearing member disposed intermediate the nut and the central body forming a part-conical surface therebetween wherein the at least one bearing member travels as the nut is rotated relative to the central body, and a thrust plate fixed to the central body against which the at least one bearing member is able to rotate under influence of rotation of the nut.

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Sakamaki et al. '033 is the closest art of record.

Sakamaki et al. '033 shows in Figures 1-3,5 and 6 a chuck comprising a central body (1) having a tail section (rearward end) for coupling with a driver (12) and a nose section (forward end) having a plurality of passageways angled with respect to the axis of rotation (col. 3, line 66 through col. 4, line 3) and slidably housing a plurality of jaws (4) carrying a thread and a jaw face, a nut (3) mounted on the central body and carrying a screw thread complementary to that of the jaw threads to promote slidable movement of each jaw within their respective passageway when the nut is rotated to advance and retract the jaws, and at least one bearing member (6) disposed intermediate the nut and the central body characterized in that between the nut and the central body a part-conical surface is formed such that the at least one bearing member may be displaced radially with respect to the axis of rotation of the central body. Sakamaki et al. '033 shows the displacement of the at least one bearing member results in frictional engagement between the bearing member and a portion of the chuck (1a) which is non-rotatable relative to the central body (col. 4, lines 17-19). Sakamaki et al. '033 shows the nut along with the central body forming the part-conical surface. Sakamaki et al. '033 shows the thrust plate along with the central body forming the part-conical surface.

Sakamaki et al. '033 lacks a chuck for use with a manual or a powered driver comprising (1) "wherein displacement of the bearing member results in frictional engagement with an axially extending circumferential lip of the thrust plate".

Although it is well known to have a chuck with a bearing assembly including a thrust plate for supporting/guiding the bearing assembly during locking and unlocking of the chuck, there is no teaching in the prior art of record that would, reasonably and absent impermissible hindsight, motivate one having ordinary skill in the art to so modify the teachings of Sakamaki et al. '033, noting that in Sakamaki et al. '033, the thrust plate (5) is flat without the presence of an

axially extending circumferential lip for frictional engagement of the bearing member during displacement. Thus, for at least the foregoing reasons, the prior art of record neither anticipates nor rendered obvious the present invention as set forth in independent claim 1.

4. Regarding claim 19, the prior art of record fails to anticipate or make obvious a chuck for use with a manual or a powered driver comprising (1) "the bearing assembly having a cage for retaining a plurality of rolling elements", solely or in combination, with a chuck for use with a manual or a powered driver having a central body including a tail section having an axial bore and a nose section having a plurality of passageways defining an axis angled with respect to the axis of rotation of the body, a plurality of jaws slidably housed with the plurality of passageways, a nut mounted on the body and rotatable about the central body having screw threads matching those on the plurality of jaws to cause movement of each jaw for advancement and retraction with the passageways, at least one bearing member disposed intermediate the nut and the central body forming a part-conical surface therebetween wherein the at least one bearing member travels as the nut is rotated relative to the central body, and a thrust plate fixed to the central body against which the at least one bearing member is able to rotate under influence of rotation of the nut.

Sakamaki et al. '033 is the closest art of record.

Sakamaki et al. '033 shows in Figures 1-3,5 and 6 a chuck comprising a central body (1) having a tail section (rearward end) for coupling with a driver (12) and a nose section (forward end) having a plurality of passageways angled with respect to the axis of rotation (col. 3, line 66 through col. 4, line 3) and slidably housing a plurality of jaws (4) carrying a thread and a jaw face, a nut (3) mounted on the central body and carrying a screw thread complementary to that of the jaw threads to promote slidable movement of each jaw within their respective passageway when the nut is rotated to advance and retract the jaws, and at least one bearing

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member (6) disposed intermediate the nut and the central body characterized in that between the nut and the central body a part-conical surface is formed such that the at least one bearing member may be displaced radially with respect to the axis of rotation of the central body. Sakamaki et al. '033 shows the displacement of the at least one bearing member results in frictional engagement between the bearing member and a portion of the chuck (1a) which is non-rotatable relative to the central body (col. 4, lines 17-19). Sakamaki et al. '033 shows the nut along with the central body forming the part-conical surface. Sakamaki et al. '033 shows the thrust plate along with the central body forming the part-conical surface.

Sakamaki et al. '033 lacks a chuck for use with a manual or a powered driver comprising (1) "the bearing assembly having a cage for retaining a plurality of rolling elements therein".

Although it is well known to have a chuck with a bearing assembly including a cage for housing a plurality of rolling elements therein, there is no teaching in the prior art of record that would, reasonably and absent impermissible hindsight, motivate one having ordinary skill in the art to so modify the teachings of Sakamaki et al. '033, noting that in Sakamaki et al. '033, the bearing assembly consists of rolling elements (6) functionally cooperating with surface 3a of nut and recess portions (7) of annular member (8) for movement suppression, and the introduction of a cage around the rolling elements would eliminate this functional relationship. Thus, for at least the foregoing reasons, the prior art of record neither anticipates nor rendered obvious the present invention as set forth in independent claim 19.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mrs. Monica S. Carter, may be reached at 571-272-4475.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


MWT
Examiner
16 May 2007


MONICA CARTER
SUPERVISORY PATENT EXAMINER